

April 2, 2002

Mr. Michel Monnier
Stalcop L.P.
1217 West Main Street
Thorntown, IN. 46071

Re: Registered Construction and Operation Status,
011-15247-00047

Dear Mr. Monnier:

The application from Stalcop L.P., received on December 3, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.1 it has been determined that the following steel, aluminum and copper cold forming operation, to be located at 1217 West Main Street, Thorntown, Indiana, is classified as registered:

- (a) Thirteen (13) natural gas-fired heaters, with a maximum heat input capacity of 0.120 mmBtu/hr each and exhaust to the atmosphere.
- (b) One (1) natural gas-fired heater, with a maximum heat input capacity of 0.300 mmBtu/hr and exhausts to the atmosphere.
- (c) One (1) natural gas-fired heater, with a maximum heat input capacity of 0.414 mmBtu/hr and exhausts to the atmosphere.
- (d) One (1) open top vapor degreaser, with a maximum solvent usage rate of 4.15 pounds per hour and exhausts to the atmosphere.
- (e) One (1) heat treating process consisting of two (2) electric brazing furnaces and one (1) annealing furnace.
- (f) One (1) cleaning area consisting of the following:
 - 1. One (1) aqueous acid copper cleaning line designated as the "Bright Dip Line", consisting of several dip tanks containing various acid cleaners and rinses;
 - 2. One (1) degreasing line designated as the "De-Scale Line", consisting of several dip tanks containing various acid cleaners and rinses to prevent rust; and
 - 3. One (1) vibratory burnisher designated as the "Dishwasher" which is used to brighten and clean both copper and steel parts.
- (g) One (1) fabrication area consisting of the following:
 - 1. Pressing;
 - 2. Machining;
 - 3. Threading;
 - 4. Grinding;
 - 5. Sanding; and
 - 6. Metal Cutting.

- (h) Three (3) identical B250 degreasers, each with a maximum solvent usage of 0.07 pounds per hour.

The following conditions shall be applicable:

1. Opacity Limitations [326 IAC 5-1-2]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the owner or operator shall comply with the following opacity limitations:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

2. Particulate Matter (PM) Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3, the allowable PM emission rate from the threading, pressing, machining, sanding, metal cutting and welding processes shall not exceed 0.551 pound per hour.

The pound per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

3. Organic Solvent Degreasing Operations, Cold Cleaner Operation Requirements [326 IAC 8-3-2]

Pursuant to 326 8-3-2, the owner or operator shall, for the bright dip line and cleaner tank of the de-scale line:

- (a) equip each cleaner with a cover;
- (b) equip each cleaner with a facility for draining cleaned parts;
- (c) close each degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain parts cleaned at the degreasers for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label on or near each cleaner, summarizing the operating requirements;
- (f) store all waste solvent generated by each cleaner in a covered container; and
- (g) not dispose or transfer any waste solvent to another party in such a manner that generates greater than twenty percent (20%) by weight evaporation.

4. Organic Solvent Degreasing Operations, Open Top Vapor Degreasing Operation Requirements [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3, the owner or operator shall, for the open top vapor degreaser:

- (a) equip it with a cover that can be opened and closed easily without disturbing the vapor zone;
- (b) keep the cover, required in part (a) of this Condition, closed at all times except when processing work loads through the degreaser;
- (c) minimize solvent carry-out by:
 - (1) racking parts to allow complete drainage;
 - (2) moving parts in and out of the degreaser at less than 3.3 meters per minute (eleven (11) feet per minute);
 - (3) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (4) tipping out any pools of solvent on the cleaned parts before removal; and
 - (5) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (d) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (e) not occupy more than half of the degreaser's open top area with the workload;
- (f) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (g) never spray above the vapor level;
- (h) repair solvent leaks immediately, or shut down the degreaser;
- (i) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (j) not use workplace fans near the degreaser opening;
- (k) not allow visually detectable water in the solvent exiting the water separator; and
- (l) provide a permanent, conspicuous label summarizing the operating requirements.

5. Organic Solvent Degreasing Operations, Cold Cleaner Operation Requirements [326 IAC 8-3-5]

Pursuant to 326 8-3-5 (Cold Cleaner Degreaser Operation and Control), the owner or operator shall, for the bright dip line and cleaner tank of the de-scale line:

- (a) equip each degreaser with a cover that is designed so that it can be easily operated with one (1) hand if:
 - (1) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (2) the solvent is agitated; or
 - (3) the solvent is heated; and

- (4) if applicable, keep the respective cover closed at all times articles are not being handled in the degreaser.
- (b) equip each degreaser with a facility for draining cleaned articles, and drain all cleaned articles for at least fifteen (15) seconds or until dripping ceases. If the solvent volatility of either cleaner is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the applicable drainage facility must be internal such that articles are enclosed under the cover while draining. However, if an internal type cannot fit into the cleaning system, said drainage facility may be external.
- (c) provide on or near each cleaner, a permanent, conspicuous label which lists the operating requirements outlined in subsection (b) of this Condition.
- (d) apply if applicable, any solvent spray such that a solid, fluid stream is created, and at a pressure that does not cause excessive splashing.
- (e) equip each degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (1) a freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (2) a water cover when solvent used is insoluble in, and heavier than, water.
 - (3) other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (f) store all waste solvent generated by each cleaner in a covered containers.

Only dispose and/or transfer waste solvent such that only twenty percent (20%) or less by weight of the waste solvent can evaporate.

6. Organic Solvent Degreasing Operations, Open Top Vapor Degreaser Operation and Control Requirements [326 IAC 8-3-6]

Pursuant to 326 IAC 8-3-6, the owner or operator shall, for the open top vapor degreaser:

- (a) equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.
- (b) equip the degreaser with the following switches:
 - (1) a condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.
 - (2) a spray safety switch which shuts off spray pump if the vapor level drops more than ten (10) centimeters (four (4) inches).
- (c) equip the degreaser with a permanent, conspicuous label which lists the operating requirements outlined in parts (e), (f), (g), (h), (i), (j), (k), (l), and (m) of this Condition.

- (d) equip the degreaser with one (1) of the following control devices:
 - (1) a freeboard ratio of seventy-five hundredths (0.75) or greater and a powered cover if the degreaser opening is greater than one (1) square meter (ten and eight-tenths (10.8) square feet).
 - (2) a refrigerated chiller.
 - (3) an enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser.
 - (4) a carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty (50) cubic feet per minute per square foot) of air to vapor interface area and an average of less than twenty-five (25) parts per million of solvent is exhausted over one (1) complete adsorption cycle.
 - (5) any other system of demonstrated equivalent or better control as those outlined in clauses (1) through (4). Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (e) keep the cleaner's cover closed at all times except when processing workloads through the degreaser.
- (f) minimize the cleaner's solvent carry-out emissions by:
 - (1) racking articles to allow complete drainage;
 - (2) moving articles in and out of the degreaser at less than three and three-tenths (3.3) meters per minute (eleven (11) feet per minute);
 - (3) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (4) tipping out any pools of solvent on the cleaned articles before removal; and
 - (5) allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry.
- (g) do not introduce into the cleaner, any porous or absorbent materials such as, but not limited to, cloth, leather, wood, or rope.
- (h) prohibit occupation of more than one-half ($\frac{1}{2}$) of the degreaser's open top area with the workload.
- (i) prohibit the loading of the degreaser to the point where the vapor level would drop more than ten (10) centimeters (four (4) inches) when the workload is removed.
- (j) prohibit solvent spraying above the vapor level.
- (k) repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately.
- (l) store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
- (m) prohibit the exhaust ventilation rate from exceeding twenty (20) cubic meters per minute per square meter (sixty-five (65) cubic feet per minute per square foot) of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration requirements.

(l) prohibit the use of workplace fans near the degreaser opening.

(m) prohibit visually detectable water in the solvent exiting the water separator.

This source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

SDF

cc: File - Boone County
Boone County Health Department
Air Compliance - Marc Goldman
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3)

Company Name:	Stalcop L.P.
Address:	1217 West Main Street
City:	Thorntown
Authorized individual:	Michael Monnier
Phone #:	(765) 436-3316
Registration #:	011-12192-00047

I hereby certify that Stalcop L.P. is still in operation and is in compliance with the requirements of Registration 011-15247-00047.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Stalcop L.P.
Source Location: 1217 West Main Street, Thorntown, IN 46071
County: Boone
SIC Code: 3499
Operation Permit No.: 011-15247-00047
Permit Reviewer: SDF

The Office of Air Quality (OAQ) has reviewed an application from Stalcop L.P. relating to the following changes to their existing registered source:

- (a) change the authorized individual on the registration's annual notification report to Michel Monnier, and
- (b) add three (3) identical B250 degreasers, each with a maximum solvent usage of 2 quarts per week.

Existing Source Equipment

The source consists of the following permitted facilities/units:

- (a) Thirteen (13) natural gas-fired heaters, with a maximum heat input capacity of 0.120 mmBtu/hr each and exhaust to the atmosphere.
- (b) One (1) natural gas-fired heater, with a maximum heat input capacity of 0.300 mmBtu/hr and exhausts to the atmosphere.
- (c) One (1) natural gas-fired heater, with a maximum heat input capacity of 0.414 mmBtu/hr and exhausts to the atmosphere.
- (d) One (1) open top vapor degreaser, with a maximum solvent usage rate of 4.15 pounds per hour and exhausts to the atmosphere.
- (e) One (1) heat treating process consisting of two (2) electric brazing furnaces and one (1) annealing furnace.
- (f) One (1) cleaning area consisting of the following:
 - 1. One (1) aqueous acid copper cleaning line designated as the "Bright Dip Line", consisting of several dip tanks containing various acid cleaners and rinses;
 - 2. One (1) degreasing line designated as the "De-Scale Line", consisting of several dip tanks containing various acid cleaners and rinses to prevent rust; and
 - 3. One (1) vibratory burnisher designated as the "Dishwasher" which is used to brighten and clean both copper and steel parts.

(g) One (1) fabrication area consisting of the following:

1. Pressing;
2. Machining;
3. Threading;
4. Grinding;
5. Sanding; and
6. Metal Cutting.

Existing Approvals

The source has been operating under 011-12192-00047, issued on October 25, 2000.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application submitted by the applicant.

An application for the purposes of this review was received on December 3, 2001.

Emission Calculations

1. Unrestricted Potential to Emit Due (UPTE) to the Proposed Equipment:

The proposed degreasers will generate volatile organic compound (VOC) emissions. The following calculations determine the potential emissions from the proposed degreaser based on a maximum combined solvent usage rate of 0.21 lb per hour, a VOC fraction of 100%, emissions before controls, and 8760 hours of operation.

$$0.21 \text{ lb solvent/hr} * 1.00 \text{ lb VOC/lb solvent} * 8760 \text{ hr/yr} * 1/2000 \text{ ton VOC/yr} = \mathbf{0.92 \text{ tons VOC/yr}}$$

2. Unrestricted Potential to Emit (UPTE) From the Existing Source:

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
MIG + TIG Welder	0.64	0.64	-	-	-	-	0.050
Stick Welder	0.09	0.09	-	-	-	-	0.004
Flame Cutter	0.71	0.71	-	-	-	-	0.003
Combustion	0.12	0.12	0.01	1.00	0.05	0.21	neg.
Degreaser	-	-	-	-	18.18	-	-
Descaler	-	-	-	-	0.06	-	-
Dip Line	-	-	-	-	3.46	-	-
Total	1.56	1.56	0.01	1.00	21.75	0.21	0.06

(a) 1 MIG Welder and 1 TIG Welder:

The following calculations determine the PM, PM10, and HAP UPTe based on 2 welders, an electrode usage rate of 3.00 lb/hr, emission factors from the American Welding Society (AWS), emissions before controls, and 8760 hours of operation.

$$\text{Emissions tons/yr} = 2 \text{ Welders} * 2.00 \text{ lb Elec./hr} * \text{Ef lb poll./lb elec.} * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb}$$

Pollutant	Ef (lb pollutant / lb electrode)	Emissions (tons/yr)
PM	0.037	0.64
PM10	0.037	0.64
Manganese (HAP)	0.003	0.05

(b) 1 Stick Welder:

The following calculations determine the PM, PM10, and HAP UPTe based on 1 welder, an electrode usage rate of 1.00 lb/hr, emission factors from the American Welding Society (AWS), emissions before controls, and 8760 hours of operation.

$$\text{Emissions tons/yr} = 1 \text{ Welder} * 1.00 \text{ lb Elec./hr} * \text{Ef lb poll./lb elec.} * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb}$$

Pollutant	Ef (lb pollutant / lb electrode)	Emissions (tons/yr)
PM	0.0211	0.09
PM10	0.0211	0.09
Manganese (HAP)	0.0009	0.004

(c) 1 Flame Cutter:

The following calculations determine the PM, PM10, and HAP UPTe based on 1 cutter, a maximum cutting rate of 8760 kin/yr, emission factors from the American Welding Society (AWS), emissions before controls, and 8760 hours of operation.

$$\text{Emissions tons/yr} = 1 \text{ Welder} * 8760 \text{ kin/yr} * \text{Ef lb poll./kin} * 1/2000 \text{ ton/lb}$$

Pollutant	Ef (lb pollutant / kin metal cut)	Emissions (tons/yr)
PM	0.1622	0.71
PM10	0.1622	0.71
Manganese (HAP)	0.0005	0.002
Chromium (Cr)	0.0003	0.001
Nickel (Ni)	0.0001	neg.

(d) Combustion Emissions:

The following calculations determine the space heater and other combustion unit emissions based on natural gas combustion, a combined maximum capacity of 19.9 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

$$19.9 \text{ MMBtu/hr} * 8760 \text{ hr/yr} * 1 \text{ E6 Btu/MMBtu} * 1/1000 \text{ cf/Btu} * 1/1 \text{ E6 MMcf/cf} * \text{Ef lb poll/MMcf} * 1/2000 \text{ ton poll/lb poll} = \text{ton poll/yr}$$

	PM 11.9 lb/MMcf	PM10 11.9 lb/MMcf	SO2 0.6 lb/MMcf	NOx 100 lb/MMcf	VOC 5.3 lb/MMcf	CO 21 lb/MMcf
ton/yr	0.12	0.12	0.01	1.00	0.05	0.21

(e) Existing Degreaser Emissions:

The following calculations determine the potential VOC emissions from the existing degreaser based on a maximum combined solvent usage rate of 4.15 lb per hour, a VOC fraction of 100%, emissions before controls, and 8760 hours of operation.

$$4.15 \text{ lb solvent/hr} * 1.00 \text{ lb VOC/lb solvent} * 8760 \text{ hr/yr} * 1/2000 \text{ ton VOC/yr} = 18.18 \text{ tons VOC/yr}$$

(f) Descale Line Emissions:

The following calculations determine the potential VOC emissions from the existing descaler based on a maximum combined solvent usage rate of 0.16 gal/hr, a solvent density of 0.95 lb/gal, a VOC fraction of 0.09, emissions before controls, and 8760 hours of operation.

$$0.16 \text{ gal/hr} * 0.95 \text{ lb mat./gal} * 0.09 \text{ lb VOC/lb mat.} * 8760 \text{ hr/yr} * 1/2000 \text{ ton VOC/yr} = 0.06 \text{ tons VOC/yr}$$

(g) Brite Dip Line Emissions:

The following calculations determine the potential VOC emissions from the brite dip line based on a maximum combined solvent usage rate of 0.93 gal/hr, a solvent density of 0.95 lb/gal, a VOC fraction of 0.09, emissions before controls, and 8760 hours of operation.

$$0.93 \text{ gal/hr} * 9.44 \text{ lb mat./gal} * 0.09 \text{ lb VOC/lb mat.} * 8760 \text{ hr/yr} * 1/2000 \text{ ton VOC/yr} = 3.46 \text{ tons VOC/yr}$$

3. Source UPTE After Addition of the Proposed Equipment:

The source emissions after addition of the proposed equipment is the sum of the existing source and new equipment UPTE.

Unit UPTE	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Existing Source	1.56	1.56	0.01	1.00	21.75	0.21	0.06
Proposed Equipment	-	-	-	-	0.92	-	-
Total	1.56	1.56	0.01	1.00	22.67	0.21	0.06

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

The following table lists the source PTE after the proposed modification.

Pollutant	Potential To Emit (tons/year)
PM	1.56
PM-10	1.56
SO ₂	0.01
VOC	22.67
CO	0.21
NO _x	1.00

HAP's	Potential To Emit (tons/year)
Manganese	0.06
Chromium	neg.
Nickel	0.001
TOTAL	0.06

The proposed degreasers and proposed change of the authorized individual shall be approved via a notice-only change to a registration pursuant to 326 IAC 2-5.5-6(d)(2) and (12) which state respectively, that modifications that consist of emission units described under 326 IAC 2-1.1-3(d)(1) through (31), and minor administrative changes such as a change in the name, address, telephone number of any person identified in a permit or a change in descriptive information concerning the source or emission units or units, are considered notice-only changes to a registration.

To issue the approval, a new registration shall be drafted which will include the existing as well as the proposed equipment, but no permit fees shall be required of the source since both proposed changes require notification only.

County Attainment Status

The source is located in Boone County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Boone County has been designated as attainment or unclassifiable for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Boone County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
MIG + TIG Welder	0.64	0.64	-	-	-	-	0.050
Stick Welder	0.09	0.09	-	-	-	-	0.004
Flame Cutter	0.71	0.71	-	-	-	-	0.003
Combustion	0.12	0.12	0.01	1.00	0.05	0.21	neg.
Degreaser	-	-	-	-	18.18	-	-
Descaler	-	-	-	-	0.06	-	-
Dip Line	-	-	-	-	3.46	-	-
Total	1.56	1.56	0.01	1.00	21.75	0.21	0.06

PSD Levels	250	250	250	250	250	250	-
Part 70 Levels	-	100	100	100	100	100	10/25

- (a) This existing source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.
- (b) This existing source is not a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

Source Status After the Proposed Modifications

The following table lists the source PTE after the proposed modification (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Unit UPTE	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Existing Source	1.56	1.56	0.01	1.00	21.75	0.21	0.06
Proposed Equipment	-	-	-	-	0.92	-	-
Total	1.56	1.56	0.01	1.00	22.67	0.21	0.06

PSD Levels	250	250	250	250	250	250	-
Part 70 Levels	-	100	100	100	100	100	10/25

- (a) This source after the proposed modification will still not be a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.
- (b) This source after the proposed modification will still not be a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

The source after the proposed modification is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

Federal Rule Applicability

1. New Source Performance Standards (NSPS)

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

2. National Emission Standards for Hazardous Air Pollutants (NESHAP)

40 CFR Part 63, Subpart T (Halogenated Solvent Cleaning) does not apply to the open top vapor degreaser or the three proposed degreasers because the solvents used by these units are not listed in 40 CFR §63.460.

There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) are applicable to this source.

State Rule Applicability - Entire Source

2. 326 IAC 2-4.1-1:

326 IAC 2-4.1-1 (New Source Toxics Rule) does not apply to the source because the potential to emit of a single HAP of each applicable unit is less than 10 tons per year and the combination HAPs of each unit is less than 25 tons per year.

2. 326 IAC 2-6:

326 IAC 2-6 (Emission Reporting) does not apply to the source, since the CO, VOC, SO₂, NO_x and PM₁₀ emissions are less than one-hundred (100) tons per year.

3. 326 IAC 5-1 (Visible Emissions Limitations):

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability (Individual Facilities) - Cleaner Tank of the Bright Dip Line and Cleaner Tank of the De-Scale Line:

1. 326 8-3-2 (Cold Cleaner Operation):

Pursuant to 326 8-3-2 (Cold Cleaner Operation), the owner or operator shall, for the bright dip line and cleaner tank of the de-scale line:

- (a) equip each cleaner with a cover;
- (b) equip each cleaner with a facility for draining cleaned parts;
- (c) close each degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain parts cleaned at the degreasers for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label on or near each cleaner, summarizing the operating requirements;
- (f) store all waste solvent generated by each cleaner in a covered container; and
- (g) not dispose or transfer any waste solvent to another party in such a manner that generates greater than twenty percent (20%) by weight evaporation.

2. 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control):

326 IAC 8-3-5 applies to any new cold cleaner degreaser which commences construction after July 1, 1990 that does not have a remote solvent reservoir. The cold cleaner degreaser operation is subject to this rule because the degreaser was constructed after the applicable date and does not have a remote solvent reservoir.

Pursuant to 326 8-3-5 (Cold Cleaner Degreaser Operation and Control), the owner or operator shall, for the bright dip line and cleaner tank of the de-scale line:

(a) equip each degreaser with a cover that is designed so that it can be easily operated with one (1) hand if:

- (1) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
- (2) the solvent is agitated; or
- (3) the solvent is heated; and

if applicable, keep the respective cover closed at all times articles are not being handled in the degreaser.

(b) equip each degreaser with a facility for draining cleaned articles, and drain all cleaned articles for at least fifteen (15) seconds or until dripping ceases. If the solvent volatility of either cleaner is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the applicable drainage facility must be internal such that articles are enclosed under the cover while draining. However, if an internal type cannot fit into the cleaning system, said drainage facility may be external.

(c) provide on or near each cleaner, a permanent, conspicuous label which lists the operating requirements outlined in subsection (b) of this Condition.

(d) apply if applicable, any solvent spray such that a solid, fluid stream is created, and at a pressure that does not cause excessive splashing.

(e) equip each degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

- (1) a freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
- (2) a water cover when solvent used is insoluble in, and heavier than, water.
- (3) other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(f) store all waste solvent generated by each cleaner in a covered containers.

Only dispose and/or transfer waste solvent such that only twenty percent (20%) or less by weight of the waste solvent can evaporate.

State Rule Applicability (Individual Facilities) - Open Top Vapor Degreaser

1. 326 IAC 8-3-3 (Open top vapor degreaser operation):

Pursuant to 326 IAC 8-3-3, the owner or operator shall, for the open top vapor degreaser:

- (a) equip it with a cover that can be opened and closed easily without disturbing the vapor zone;
- (b) keep the cover, required in part (a) of this Condition, closed at all times except when processing work loads through the degreaser;
- (c) minimize solvent carry-out by:
 - (1) racking parts to allow complete drainage;
 - (2) moving parts in and out of the degreaser at less than 3.3 meters per minute (eleven (11) feet per minute);
 - (3) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (4) tipping out any pools of solvent on the cleaned parts before removal; and
 - (5) allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (d) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (e) not occupy more than half of the degreaser's open top area with the workload;
- (f) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (g) never spray above the vapor level;
- (h) repair solvent leaks immediately, or shut down the degreaser;
- (i) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (j) not use workplace fans near the degreaser opening;
- (k) not allow visually detectable water in the solvent exiting the water separator; and
- (l) provide a permanent, conspicuous label summarizing the operating requirements.

2. 326 IAC 8-3-6 (Open top vapor degreaser operation and control requirements):

326 IAC 8-3-6 applies to any new facility which commences construction after July 1, 1990 and has an air to solvent interface of 1 square meter or greater. The open top vapor degreaser is subject to this rule because the degreaser was constructed after the applicable date and has a solvent interface greater than 1 square meter.

Pursuant to 326 IAC 8-3-6, the owner or operator shall, for the open top vapor degreaser:

- (a) equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.
- (b) equip the degreaser with the following switches:
 - (1) a condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.
 - (2) a spray safety switch which shuts off spray pump if the vapor level drops more than ten (10) centimeters (four (4) inches).
- (c) equip the degreaser with a permanent, conspicuous label which lists the operating requirements outlined in parts (e), (f), (g), (h), (i), (j), (k), (l), and (m) of this Condition.
- (d) equip the degreaser with one (1) of the following control devices:
 - (1) a freeboard ratio of seventy-five hundredths (0.75) or greater and a powered cover if the degreaser opening is greater than one (1) square meter (ten and eight-tenths (10.8) square feet).
 - (2) a refrigerated chiller.
 - (3) an enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser.
 - (4) a carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty (50) cubic feet per minute per square foot) of air to vapor interface area and an average of less than twenty-five (25) parts per million of solvent is exhausted over one (1) complete adsorption cycle.
 - (5) any other system of demonstrated equivalent or better control as those outlined in clauses (1) through (4). Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (e) keep the cleaner's cover closed at all times except when processing workloads through the degreaser.
- (f) minimize the cleaner's solvent carry-out emissions by:
 - (1) racking articles to allow complete drainage;
 - (2) moving articles in and out of the degreaser at less than three and three-tenths (3.3) meters per minute (eleven (11) feet per minute);
 - (3) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (4) tipping out any pools of solvent on the cleaned articles before removal; and
 - (5) allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry.
- (g) do not introduce into the cleaner, any porous or absorbent materials such as, but not limited to, cloth, leather, wood, or rope.
- (f) prohibit occupation of more than one-half ($\frac{1}{2}$) of the degreaser's open top area with the workload.

- (g) prohibit the loading of the degreaser to the point where the vapor level would drop more than ten (10) centimeters (four (4) inches) when the workload is removed.
- (h) prohibit solvent spraying above the vapor level.
- (i) repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately.
- (j) store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
- (k) prohibit the exhaust ventilation rate from exceeding twenty (20) cubic meters per minute per square meter (sixty-five (65) cubic feet per minute per square foot) of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration requirements.
- (l) prohibit the use of workplace fans near the degreaser opening.
- (m) prohibit visually detectable water in the solvent exiting the water separator.

State Rule Applicability (Individual Facilities) -Three B250 Vapor Degreasers:

Pursuant to 326 IAC 8-3-1(a)(2), new facilities after January 1, 1980, performing organic solvent degreasing operations anywhere in the state are subject to the requirements of 326 IAC 8-3-2, 326 IAC 8-3-3, and 326 IAC 8-3-4.

1. 326 IAC 8-3-2 (Organic Solvent Degreasing Operations: Cold Cleaner Operation):

The three proposed degreasers are not subject to 326 IAC 8-3-2 because the degreasers, as stated by Cornerstone Environmental, are vapor degreasers, not cold cleaners.

2. 326 IAC 8-3-3 (Organic Solvent Degreasing Operations: Open Top Vapor Degreasing Operations):

The three proposed degreasers are not subject to 326 IAC 8-3-3 because the degreasers, as stated by Cornerstone Environmental, are closed top vapor degreasers, not open top vapor degreasers.

3. 326 IAC 8-3-4 (Organic Solvent Degreasing Operations: Conveyorized Degreaser Operations):

The three proposed degreasers are not subject to 326 IAC 8-3-4 because the degreasers, as stated by Cornerstone Environmental, are not conveyorized.

Pursuant to 326 IAC 8-3-1(b)(2), any new facility, construction of which commences after July 1, 1990, that are either a cold cleaner degreaser without a remote solvent reservoir, an open top vapor degreaser with an air to solvent interface of one (1) square meter or greater, or a conveyorized degreaser with an air to solvent interface of two (2) square meters or greater, is subject to the requirements of 326 IAC 8-3-5, 326 IAC 8-3-6, and 326 IAC 8-3-7.

Since the proposed degreasers are not cold cleaners, open top degreasers, or conveyorized, 326 IAC 8-3-5, 326 IAC 8-3-6, and 326 IAC 8-3-7 do not apply.

4. 326 IAC 8-1-6: (State BACT Requirements):

Although no other Article 8 rules apply, 326 IAC 8-1-6 does not apply to the three proposed degreasers because the combined potential VOC emissions (0.92 tons/yr) is less than the applicable level of 25 tons per year.

State Rule Applicability (Individual Facilities) - Fabrication Area (consisting of threading, pressing, machining, sanding, grinding, metal cutting and welding)

1. 326 IAC 6-3-2 (Process Operations):

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Therefore, the threading, pressing, machining, sanding, metal cutting and welding operations shall not exceed 0.551 pounds per hour per unit, based on a maximum process weight of less than 100 pounds per hour per unit.

Conclusion

The proposed degreasers shall be constructed and operated, and the other units of the source shall be operated according to the requirements specified in **Registration 011-15247-00047**.